

WEIGHTED FAIR QUEUE HAVING EXTENDED EFFECTIVE RANGEABSTRACT

A scheduler for a network processor includes a scheduling queue in which weighted fair queuing is applied to define a sequence in which flows are to be serviced. The scheduling queue includes at least a first subqueue and a second subqueue. The first subqueue has a first range and a first resolution, and the second subqueue has an extended range that is greater than the first range and a lower resolution that is less than the first resolution. Flows that are to be enqueued within the range of highest precision to the current pointer of the scheduling queue are attached to the first subqueue. Flows that are to be enqueued outside the range of highest precision from the current pointer of the scheduling queue are attached to the second subqueue. Numerous other aspects are provided.